



User's Guide User's Guide User's Guide User's Guide User's Guide User's Guide

Travan 40GB Internal Storage System

Travan 40

Quantum Travan 40 GB Internal Storage System, P/N 50002765, May 2005
Made in USA.

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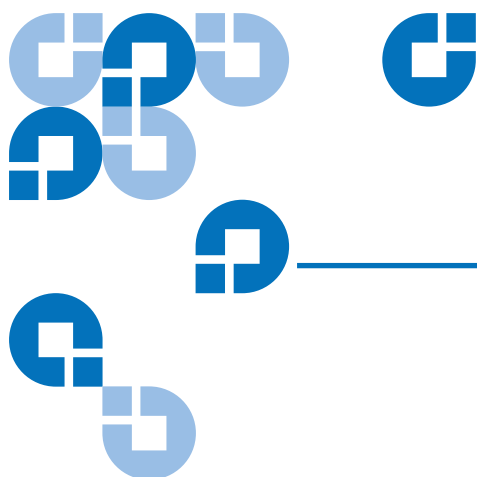
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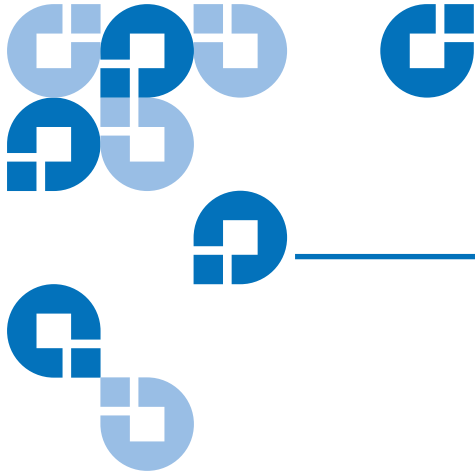
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Chapter 1 Introduction

About This Manual

This manual describes how to install and operate your new Quantum Travan 40GB tape drive. The manual also contains information on troubleshooting and technical support for your new drive.

Note: Wherever a page number is referenced in this online manual, you can click on the page number to jump to that page. You can return to the original page by clicking the back button in your viewer software.

About Your Travan Tape Drive

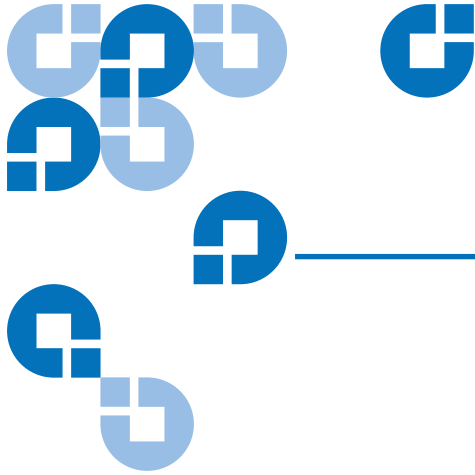
The Travan 40GB can store up to 40 Gbytes on a single Travan 40 cartridge, and features a data transfer rate of up to 240 Mbytes per minute.

Note: These values are based on 2:1 data compression. Uncompressed values are one half as high. Capacities, backup speeds and transfer rates will vary with file type and system configuration.

This drive also includes Quantum FastSense™ technology for optimizing drive and host data transfer rates.

The Travan 40GB can read and write Travan 40 cartridges. It can read but not write Travan 20 or NS20 (TR-5) cartridges.

Note: This drive cannot use TR-1, TR-2, TR-3, TR-4, or QIC-80 cartridges.



Chapter 2

Installing the Drive

What You Will Need

You will need a standard flat-bladed screwdriver and a PHILLIPS® screwdriver to install the tape drive in your computer.

This tape drive must be attached to a secondary IDE port. If your computer has two IDE ports, and the secondary port is not being used, you may need to obtain a 40-pin IDE interface cable for your tape drive.

If your computer has only a single IDE port, you will need to obtain a new ATAPI host adapter that provides a secondary IDE port for the tape drive. You will also need a second 40-pin IDE interface cable for your tape drive.

Important Precautions

To protect your computer and drive from electrostatic damage, follow these guidelines:

Before you open your computer or remove the drive from its antistatic bag, ground yourself by touching the metal chassis of your computer or

some other grounded object. For optimal protection, use an electrostatic grounding strap.

Note: To be properly grounded, your computer must be plugged into a grounded electrical outlet.

Do not touch any printed circuit boards or electronic chips on your drive or in your computer.

Installation Procedure

Follow the steps below to install the Travan 40GB drive in your computer.

We recommend that you install your backup software before you install your tape drive. For more information, see the instructions that came with the backup software.

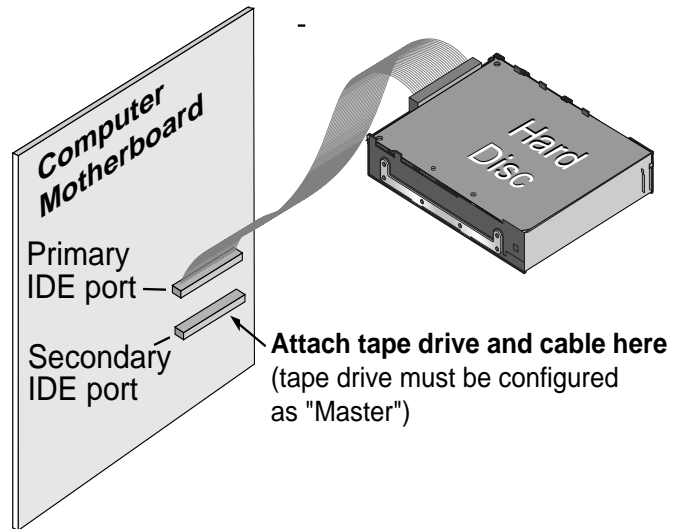
1 Decide where to attach the tape drive

Before you install your tape drive, you should determine how many IDE ports your computer has. You may find this information in the manual for your computer. You can also look inside your computer and compare your system with [figure 1](#), [figure 2](#), and [figure 3](#).

If your computer has two IDE ports:

Most modern computers have two IDE ports. Each port can support up to two devices (on a single IDE cable). A hard disk is usually attached to the primary IDE port, see [figure 1](#). **However, the Travan 40 should not be attached to an IDE port that is being used by a hard disc or a sound card. Thus, you must use the secondary IDE port for your tape drive.**

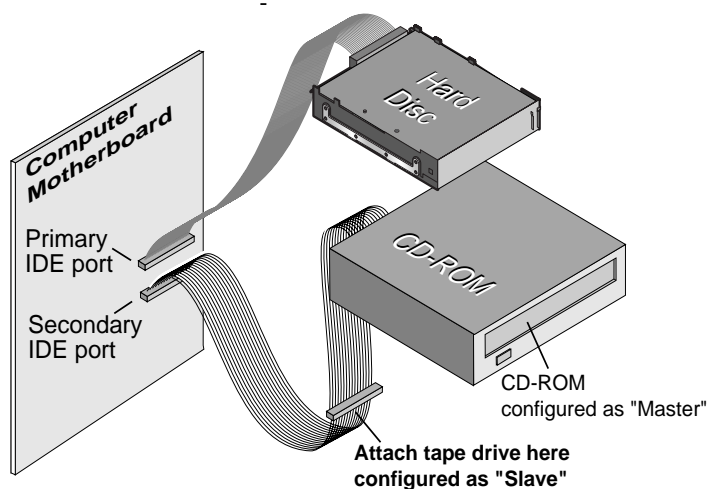
Figure 1 Existing
Computer With Two IDE
Ports (Hard Disc
Attached to the Primary
IDE Port)



If no devices or cables are attached to the secondary IDE port (see [figure 1](#)) you will need to obtain a second IDE cable for your tape drive.

If a CD-ROM or other compatible device is attached to the secondary IDE port (see [figure 2](#)) you can install the tape drive on the same cable as the CD-ROM.

Figure 2 Existing
Computer with Two IDE
Ports (ATAPI Devices on
Both Primary and
Secondary IDE Ports)



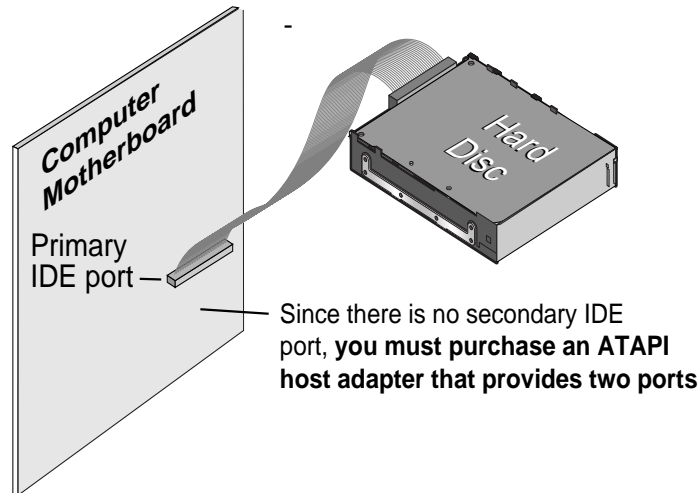
Continue to page 7 for instructions on setting the master/slave jumpers.

If your computer has only one IDE port:

If your computer has only a single IDE port (see [figure 3](#)) it is probably being used by the hard disc drive. **You should not attach your tape drive to an IDE port that is being used by a hard disc or a sound card.**

In this situation, before you can install the tape drive, you must purchase an ATAPI host adapter that provides a second IDE port. You will also need a second IDE cable for the tape drive. After installing the host adapter, set the master/slave jumpers.

Figure 3 Existing computer with only one IDE port (hard disc attached to primary port)



2 Set the master/slave jumpers

Will the tape drive be sharing the secondary IDE port with any other devices?

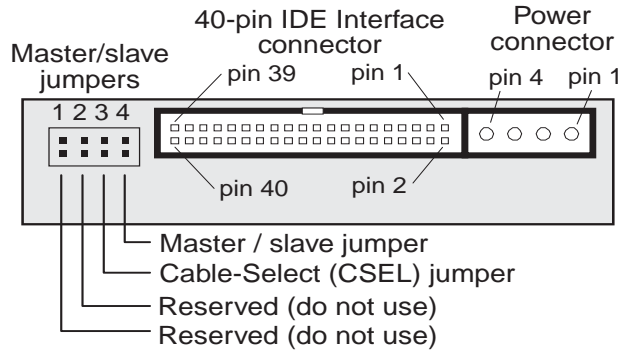
If a compatible ATAPI device, such as a CD-ROM, is already attached to your secondary IDE port (see [figure 2](#)) make sure that the existing ATAPI device is configured as a “master.” Configure the tape drive as a “slave,” (see [figure 4](#)).

Note: Do not attach your tape drive to an IDE port that is being used by a hard disc or a sound card.

If your tape drive will be the only device on the IDE cable, you need to configure your tape drive as a “master” (see [figure 4](#)).

If your IDE cable supports “Cable Select,” configure the drive for “Cable Select” (see [figure 4](#)). The second ATAPI device must also be configured for “Cable Select.”

Figure 4 Second
ATAPI Device
Configured for "Cable
Select"



Jumper settings for Travan 40 tape drive:

	Tape drive set as "slave"
	Tape drive set as "master"
	Tape drive set for "Cable Select" (tape drive is master or slave depending on its location on the interface cable)

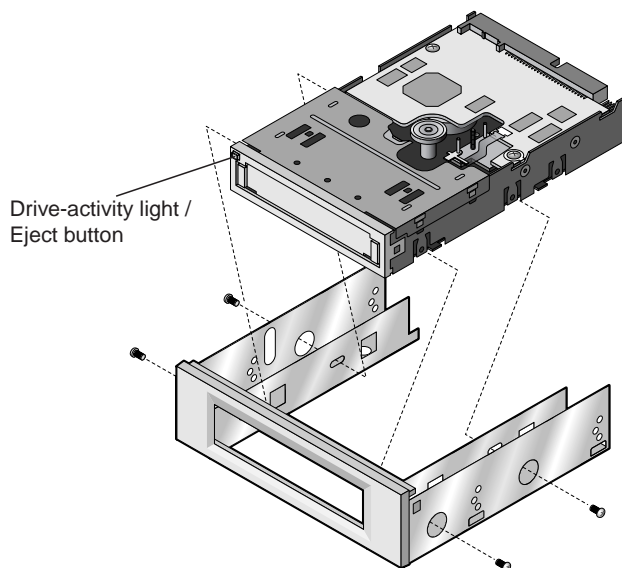
3 Attach or remove mounting brackets

Are you mounting the drive in a 3.5-inch or 5.25-inch drive bay?

If you are mounting the drive in a 5.25-inch drive bay and your drive did not come with brackets already attached, you must attach mounting brackets to each side of the drive (see [figure 5](#)).

If you are mounting the tape drive in a 3.5-inch drive bay, you may need to remove the mounting brackets from each side of the drive.

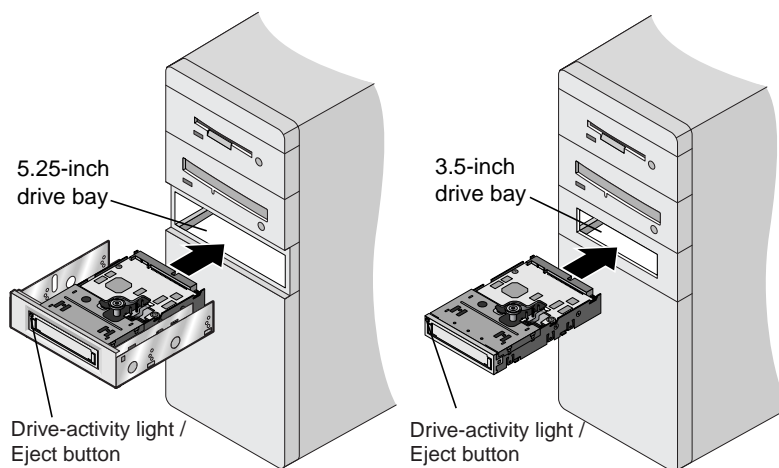
Figure 5 You may have to remove the mounting brackets



4 Mount the drive

Slide the drive into an unused drive bay until the bezel is flush with the front of the computer. The Drive-activity light/Eject button should be on the upper left (see [figure 6](#)). Secure the drive using four mounting screws. Do not overtighten the screws.

Figure 6 The Drive-Activity Light/Eject Button Should Be On



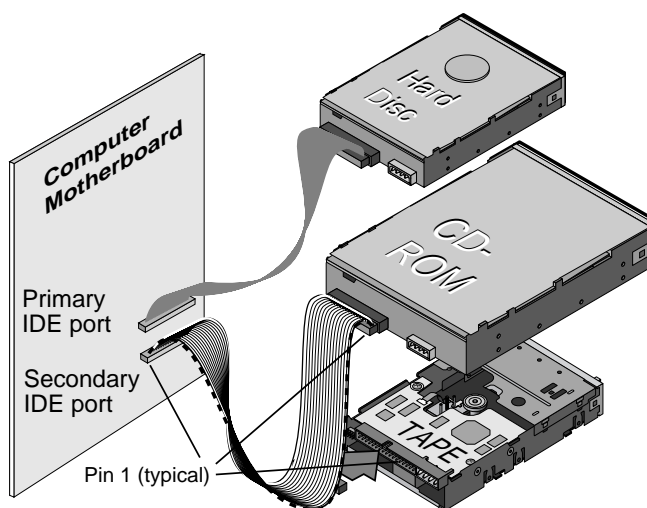
5 Attach your tape drive to the secondary IDE port

Are any other devices attached to your secondary IDE port?

If you already have a CD-ROM or other device attached to your secondary IDE port, attach the tape drive to the middle connector on the IDE cable (see [figure 7](#)).

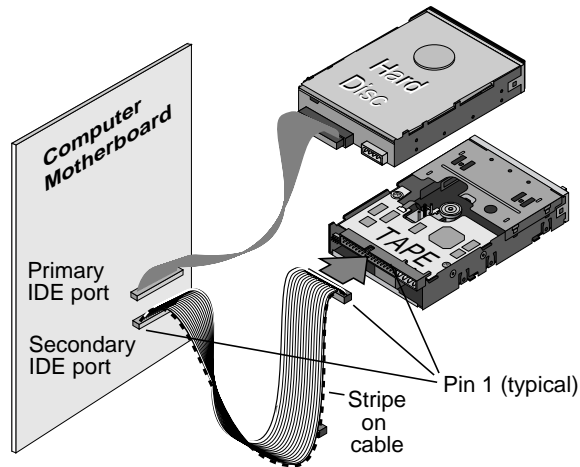
Note: Do not attach your tape drive to a cable that is already being used by a hard disc or a sound card.

Figure 7 If a CD-ROM is Attached, Attach the Tape Drive to the Middle Connector



If no other devices are attached to your secondary IDE port, use a new 40-pin IDE cable to attach the tape drive to the secondary IDE port (see [figure 8](#)).

Figure 8 Use a New
40-Pin IDE Cable

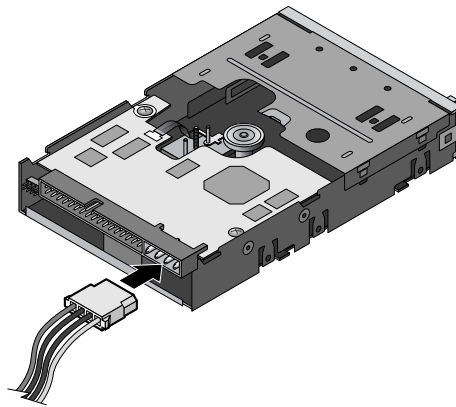


In either case, make sure that pin 1 on the tape drive (located next to the power connector) is connected to pin 1 on the IDE cable and on the IDE port connector. Pin 1 on the IDE cable is indicated by a stripe on the edge of the cable.

6 Connect the power cable

Connect a 4-pin power cable to the back of the tape drive (see [figure 9](#)). If all the power cables in your computer are being used by other devices, you can purchase a Y-shaped power-cable splitter from your computer dealer.

Figure 9 4-Pin Power
Cable Connection



7 Check all cables in your computer system

Make sure that no cables have loosened during the installation. Make sure that all cables are routed so that they will not bind or become crimped when you replace the cover of your computer.

8 Reinstall your computer cover

Your new tape drive is ready for use. However, you may need to install drivers for your operating system, as described in step 9.

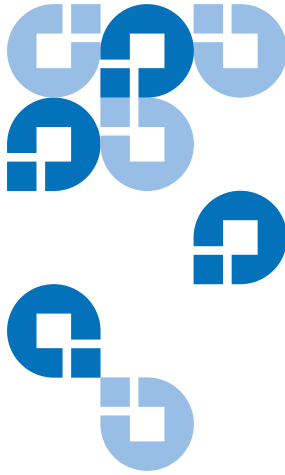
9 Install drivers (Windows systems only)

The first time you restart your computer after installing the Travan 40 tape drive, the Windows operating system will try to identify the drive. To complete this process, you need to install the Windows tape drivers supplied on your Quantum Tape Resource CD.

Windows systems include a driver installation wizard, which will step you through the process. When asked to locate the drivers, insert your Quantum Tape Resource CD into your CD-ROM drive and select to have the wizard find the drivers automatically on the CD.

Using The Tape Drive

For instructions on using and maintaining your Travan 40 tape drive and cartridges, see [chapter 3](#). For instructions on using your backup software, see the online manual that came with your software.



Operation and Maintenance

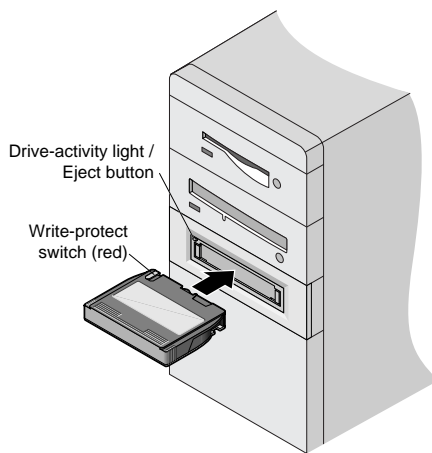
Loading and Unloading Cartridges

On the front of your drive is an opening for inserting Travan cartridges. A protective door covers the opening. Above and to the left of the door is the drive-activity light that doubles as a cartridge-eject button.

To Load a Cartridge

Insert the cartridge in the drive with the metal base plate facing down and the red write-protect tab on the left (see [figure 10](#)). The cartridge only fits in one orientation. Push the cartridge gently into the drive until it is gripped by the drive mechanism and pulled into the drive.

Figure 10 To Load a Cartridge



To Unload a Cartridge

Wait until the **Drive-activity/Eject** button light is off. Then push the **Eject** button. When the cartridge has been ejected by the drive, grasp the exposed sides of the cartridge and pull the cartridge straight out. If the drive-activity light has gone out, but you believe your backup or restore operation did not complete, repeat the backup or restore.

Caution: Do not remove a tape cartridge while the drive-activity light is on.

Handling Travan Cartridges

Although Travan tape cartridges are ruggedly built, they must be handled with care. Observe the following precautions:

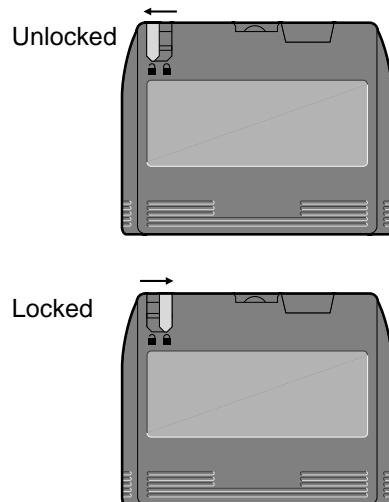
- Store cartridges in their protective cases when you are not using them.
- Keep cartridges away from dust, dirt and moisture.
- Keep cartridges away from direct sunlight and heat sources, such as radiators or warm air ducts.

- Do not expose cartridges to temperature extremes or rapid changes in temperature.
- Keep cartridges away from sources of strong electromagnetic fields, such as telephones, computer monitors, printers, dictation equipment, mechanical or printing calculators, motors or bulk tape erasers.
- Do not open the tape access door of a cartridge or touch the tape itself. One fingerprint can prevent the drive from reading information on the tape.

Setting the Write-Protect Switch

Travan cartridges feature a write-protect or “lock” switch near the upper left corner of the cartridge (see [figure 11](#)). When the write-protect switch is in the “unlocked” position, the cartridge is ready for normal writing and reading. When the write-protect switch is in the “locked” position, the drive can read data from the cartridge, but cannot write to the cartridge. Cartridges are shipped from the factory with the write-protect switch set to the “unlocked” position.

Figure 11 Write-Protect Feature



Retensioning Tapes

Travan tapes must be retensioned frequently to ensure data integrity and optimize drive performance. If you ever have a problem reading a tape, retensioning may solve the problem. Some backup software automatically retensions Travan media before a backup or restore. See your software manual for tape retensioning instructions.

We recommend retensioning whenever a cartridge:

- Is being used for the first time
- Has not been used for over a month
- Has been dropped
- Has been shipped from one location to another
- Has been exposed to a significant change in temperature

For optimum performance, cartridges should be retensioned prior to each use if your backup software does not retension them automatically. See the literature included with your tape cartridge for additional cartridge operating recommendations.

Cleaning the Tape Drive Mechanism

Under typical conditions, the tape heads should be cleaned after every twenty-four hours of use. However, in adverse conditions or when error rates become high, the tape drive recording mechanism should be cleaned after every eight hours of use.

Use only a dry-process cleaning cartridge to clean this drive. When you insert a cleaning cartridge in the drive, the drive recognizes the cleaning cartridge and automatically starts the cleaning process. After about 10 seconds, when the cleaning process is complete, the **DRIVE** LED stops flashing and the cleaning cartridge is ejected. Travan cleaning cartridges (model number CTMCL) are available by calling 1-800-626-6637 (North American customers only).

Recommended Tape Cartridges

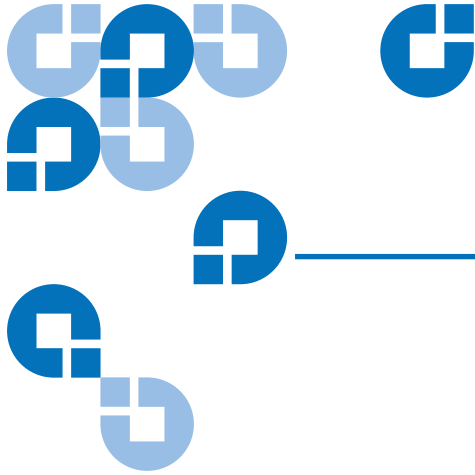
[Table 1](#) summarizes the types of tape cartridges that can be used with Quantum Travan 40GB drives. All other tape formats are incompatible.

Note: The capacities shown below are based on 2:1 data compression. Uncompressed values are one half as high. Capacities, backup speeds and transfer rates will vary with file type and system configuration.

Table 1 Tape
Information

Tape Frame	Capacity	Length
Travan 40 Quantum model CTM40	40 Gbytes	750 ft
Travan 20/NS20 (TR-5)* Quantum model CTM20	20 Gbytes	740 ft

Note: The Quantum Travan 40 drive can read but not write to TR-5 cartridges.



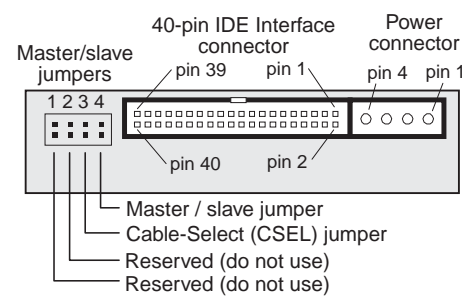
Chapter 4 Troubleshooting

Installation troubleshooting

If, after installing the Travan 40GB drive, your computer does not recognize your tape drive or CD-ROM:

- Make sure all cables are attached firmly.
- Check with the manufacturer of your ATAPI controller chip set to make sure that you have the latest drivers for your operating system. Outdated or incorrect drivers provide limited hardware support and can result in Windows being unable to detect your tape drive.
- You may need to reconfigure your tape drive as a “master” or “slave” using the master/slave jumpers (see [figure 12](#)).
 - If the tape drive is the only device on the IDE cable, set the jumper to configure it as a “master.”
 - If there are two ATAPI devices on a single cable, make sure that the tape drive is configured as a “slave.” Set the other device as a “master.”

Figure 12 Master/
Slave Jumpers
Reconfiguration



Jumper settings for Travan 40 tape drive:

	Tape drive set as "slave"
	Tape drive set as "master"
	Tape drive set for "Cable Select" (tape drive is master or slave depending on its location on the interface cable)

Tape Operations Troubleshooting

If, after a period of successful operation, the tape drive appears to fail during a backup or restore.

- Retension the tape. See your backup-software manual for instructions.
- Make sure the drive-activity light is off. Remove the cartridge and reinsert it into the drive. Retry the backup or restore procedure.
- Try a different cartridge – preferably one that has never been used before.
- Make sure you are using the correct type of tape cartridge (see [table 1](#)). You cannot use TR-1, TR-2, TR-3, TR-4, or QIC-80 tapes with this drive.
- Clean the tape mechanism.
- Check to make sure all cables are securely connected and all jumpers are set appropriately.

- Turn off the computer. Wait for the computer to power down. Then restart the system. Restart the backup software, making sure that no other programs (such as virus scanners) are running.
- Run the diagnostic software provided on the Tape Resource CD.

